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09/858,137	05/15/2001	Eberhard Lipp	1746-6	1743

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EXAMINER

COOLEY, CHARLES E

ART UNIT

PAPER NUMBER

1723

14

DATE MAILED: 07/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/858,137

Applicant(s)  
Lipp

Examiner  
Charles Cooley

Art Unit  
1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 Apr 2003
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 17-26 is/are pending in the application.
- 4a) Of the above, claim(s) 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-22 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 17-26 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 28 Apr 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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## **OFFICE ACTION**

### ***Election/Restriction***

1. Newly presented claims 23-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Note claims 23-25 are directed to nonelected Species B: Figures 4-5. Since Applicant elected Species A in Paper No. 10, any claims specifically drawn to a nonelected species are withdrawn.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119, which papers have been placed of record in the file.

### ***Drawings***

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 28 APR 2003 have been approved by the examiner.

### ***Specification***

4. The title of the invention and abstract are acceptable.

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***Claim Rejections - 35 U.S.C. § 112, first paragraph***

5. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as the specification, as originally filed, does not provide support for the invention as is now claimed and failing to adequately teach how to make and/or use the invention, i.e., failing to provide an enabling disclosure.

The specification is not considered to support the subject matter of newly presented claim 26. The specification does not support the claim language “each of said first and second spiral-shaped mixing blades having a shearing head affixed to a lower end thereof” found in claim 26. Only a single shearing head on the axle is supported by the written specification and drawings.

Newly presented claim 22 is rejected under 35 U.S.C. 112, first paragraph, because the specification does not provide enablement for the recited “mixing spiral means for rotating said first and second spiral-shaped mixing blades at different rotational speeds”. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims because it is unclear how “mixing spiral means” can possibly provide the function of rotating the blades at different

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speeds. The claims are not supported by an enabling disclosure because the person skilled in the art would not know how to make or use the invention without a description of elements to perform the function (MPEP 2185).

35 U.S.C. 112, ¶6 states that “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function, without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.”

While 35 U.S.C. 112, ¶6 permits a particular form of claim limitation, it cannot be read as creating an exception either to the description, enablement or best mode requirements of the first paragraph or the definiteness requirement of the second paragraph of 35 U.S.C. 112. *In re Knowlton*, 481 F.2d 1357, 178 USPQ 486 (CCPA 1973).

The specification is devoid of the corresponding structure which perform the function recited in claim 22. The instant specification does not set forth the structure corresponding to the means-plus-function claim limitations in claim 22. In *B. Braun Medical, Inc. v. Abbott Lab.*, 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1900 (Fed. Cir. 1997) the Federal Circuit stated that “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. This duty to link or associate structure to function is the *quid pro quo* for the convenience of employing

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Section 112, Para. 6.” Since no corresponding structure has been linked to the function in the means-plus-function limitation of claim 22, the specification does not provide enablement for the recited “mixing spiral means for rotating said first and second spiral-shaped mixing blades at different rotational speeds”.

6. Claim 22 is rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

7. Claim 26 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

***Claim Rejections - 35 U.S.C. § 112, second paragraph***

8. Claim 22 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Since no corresponding structure has been linked to the function in the means-plus-function limitation of claim 22 as explained above, the claim is indefinite. *In re Dossel*, 115 F.3d 942, 946, 42 USPQ2d 1881, 1884 (Fed. Cir. 1997) and see MPEP 2185.

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***Claim Rejections - 35 U.S.C. § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 17-18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Marshall (US 3,675,902).

The patent to Marshall (US 3,675,902) discloses a machine comprising a housing 10 with an interior volume; rotatable axle 22; mixing spiral means including a first spiral-shaped mixing blade 18 affixed to the axle in a first position and a second spiral-shaped mixing blade 18 affixed to the axle in a second position; a transition zone 26 separating the first and second positions; the transition zone having no spiral-shaped mixing blade extending from the axle; the two blades 18 inherently having different conveying capacities by virtue of the upper blade 18 being larger and having more surface area than the lower blade 18.

***Claim Rejections - 35 U.S.C. § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

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subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 19-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Marshall (US 3,675,902).

Marshall (US 3,675,902) shows that the mixing blades 18 each have a periphery but does not show the blades having different helix angles and widths. However, the disclosure of Marshall (US 3,675,902) suggests that the blades may be of any spiral configuration (col. 1, lines 63-64) and the blades may have various widths and pitch angles (col. 3, lines 10-14). Accordingly, in view of the teachings within the four corners of the Marshall reference, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the blades of the Marshall device such that the blades are of different configurations and have different helix angles and widths to adapt the mixer to varying operational parameters or substances (such as those outlined in col. 3, lines 15-30).

Regarding claim 21, the only positively recited structure is that the blades have a periphery which is clearly shown in Fig. 1 of Marshall. This claim is devoid of any further structure or means to accomplish the different rotational speeds recitation.

13. Claims 17-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Boxall (US 5,447,369) in view of Marshall (US 3,675,902).



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Boxall (US 5,447,369) discloses a machine comprising a housing 1 with an interior volume; rotatable axle 13; mixing spiral means including a first spiral-shaped mixing blade 17 affixed to the axle in a first position and a second spiral-shaped mixing blade 18 affixed to the axle in a second position; a transition zone (proximate 19) separating the first and second positions; the transition zone having no spiral-shaped mixing blade extending from the axle; the two blades 17, 18 inherently having different conveying capacities by virtue of the upper blade 17 being an elongated ribbon type blade while the lower blade 18 being an axially shorter and solid, tapered type blade; the blades having different helix angles as seen in Fig. 1; the blade widths being different as seen in Fig. 1; and the mixing blades 17, 18 each have a periphery. Boxall does not disclose the upwardly conveying direction of the mixing spiral means.

Marshall (US 3,675,902) discloses a similar mixing device as noted above and teaches that the conveying direction of the mixing spiral means is determined by the direction of rotation of the axle. Accordingly, in view of the teachings of the Marshall reference, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have rotated the mixing spiral means in Boxall in either direction of rotation such that the conveying direction is upward or downward as desired for the purpose of conveying the material in a particular direction in the housing such that agitation of the material is enhanced or for discharging purposes (col. 1, lines 65-68 and col. 2, lines 6-36).

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14. Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Boxall (US 5,447,369) in view of Marshall (US 3,675,902) and Schwing (US 4,310,124).

Boxall (US 5,447,369) in view of Marshall (US 3,675,902) discloses the recited subject matter substantially as claimed as noted above with the exception of the shearing heads. Schwing (US 4,310,124) discloses a similar mixing device having a housing 2 with an axle 8 therein. The axle has various mixing means thereon as seen in Fig. 1 including shearing heads 11 and 27 mounted on the axle. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the mixer of Boxall in view of Marshall with shearing heads on the axle as disclosed by Schwing for the purpose of shearing and breaking up the material to aid in the transport of the material (col. 1, lines 52-57; col. 2, lines 48; and col. 3, lines 65-67).

15. Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Marshall (US 3,675,902) in view of Schwing (US 4,310,124).

Marshall (US 3,675,902) discloses the recited subject matter substantially as claimed as noted above with the exception of the shearing heads. Schwing (US 4,310,124) discloses a similar mixing device having a housing 2 with an axle 8 therein. The axle has various mixing means thereon as seen in Fig. 1 including shearing heads 11 and 27 mounted on the axle. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the mixer of Marshall with shearing heads on the axle as disclosed by Schwing for the purpose of

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shearing and breaking up the material to aid in the transport of the material (col. 1, lines 52-57; col. 2, lines 48; and col. 3, lines 65-67).

### ***Response to Amendment***

16. Applicant's arguments filed 28 APR 2003 have been fully considered but they are not deemed to be persuasive.

Applicant is reminded that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Turning to the rejection of the claims under 35 U.S.C. § 102(b), it is noted that the terminology in a pending application's claims is to be given its broadest reasonable interpretation (*In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)) and limitations from a pending application's specification will not be read into the claims (*Sjolund v. Musland*, 847 F.2d 1573, 1581-82, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988)).

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Anticipation under 35 U.S.C. § 102(b) is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1064 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988); *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Moreover, anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of properties that are inherently possessed by the prior art reference. *Verdegaal Brothers Inc. v. Union Oil Co. of California*, 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir. 1987), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject matter of a claim when that reference discloses each and every element set forth in the claim (*In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994) and *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)); however, the law of anticipation does not require that the reference teach what Applicant is claiming, but only that the claims "read on" something disclosed in the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984) (and overruled in part on another issue), *SRI Intel v. Matsushita Elec. Corp. Of Am.*, 775 F.2d 1107, 1118, 227 USPQ 577, 583 (Fed. Cir. 1985). Also, a reference anticipates a claim if it discloses the claimed invention such that a skilled artisan could take its teachings in combination with

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his own knowledge of the particular art and be in possession of the invention. See *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), *cert. denied*, 116 S.Ct. 1362 (1996), quoting from *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962).

With respect to the applied prior art under 35 U.S.C. § 102(b), the examiner has explicitly demonstrated how the reference discloses each and every element set forth in the claims and how the pending claims read on the disclosure of the reference, hence the rejection is considered proper.

Claim 17 recites that the transition zone has no spiral-shaped mixing blades extending from the axle. With respect to Marshall, the blades 18 are clearly interrupted by transition zone 26 and there are no spiral-shaped mixing blades within the transition zone. The elements 28 in the transition zone are clearly not spiral shaped and extend from the wall of the housing. Note these elements 28 do not have to be attached to the axle (see col. 1, lines 69-75). The "protrusions" 32 are not in the transition zone 26 and are not described as being spiral shaped. For these reasons, the rejection of the claims over Marshall is not believed to be in error.

Applicant states new claim 23 is a combination of claim 1 and claim 12 but note claim 12 was withdrawn from consideration in the previous office action and therefore claims 23-25 are withdrawn as noted above.

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**Conclusion**

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION. **ANY RESPONSE FILED AFTER THE MAILING DATE OF THIS FINAL REJECTION WILL BE SUBJECT TO THE PROVISIONS OF MPEP 714.12 AND 714.13.**

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Charles Cooley whose telephone number is ☎ (703) 308-0112.

19. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is ☎ (703) 308-0651.

Dated: 8 July 2003



**Charles Cooley  
Primary Examiner  
Art Unit 1723**